IN THE CLAIMS

Please take action regarding the claims so that the status is as follows:

1. (Currently Amended) ~~A process for regenerating a water softening system~~ Two independently controlled water treatment processes comprising a first process for removing multivalent hardness ions from water and a second process for removing monovalent ions from the brine water to a predetermined level, ~~said process of the type that removes multivalent ions from water, the water softening system including~~ wherein said first process utilizes a softening tank through which the water to be softened passes from an upstream to a downstream end[[;]], a brine tank for holding a monovalent regenerating brine solution[[;]], a first diverter valve connected between the brine tank and the upstream end of the softening tank[[;]], ~~a nanofilter, having upstream and downstream sides, for passing monovalent ions to the downstream side and retaining multivalent ions on the upstream side,~~ and a second diverter valve connecting between the downstream end of the softening tank and selectively to the upstream side of the brine tank; ~~and, a connection between the downstream side of the nanofilter and the brine tank,~~ and wherein said first process comprising the steps of:

a) operating the first diverter valve to pass brine solution from the brine tank through the softening tank of the water softening system; and

b) operating the second diverter valve to direct liquid from the downstream end of the softening tank to the brine tank[[;]].

~~c) directing unmodified liquid from the brine tank to the nanofilter;~~

~~d) directing the liquid on the downstream side of the nanofilter to the brine tank; and;~~

~~e) directing the liquid on the upstream side of the nanofilter to a drain.~~

2. (Currently Amended) ~~The process of claim 1, wherein the water softening system includes~~ In said second process of claim 1, the processing system is further of the type that includes a nanofilter, having upstream and downstream sides, for passing monovalent ions to the downstream side of the nanofilter and retaining multivalent ions on the upstream side of the nanofilter; further including a connection between the downstream side of the nanofilter and the brine tank, and a pump receiving

brine solution from the brine tank and supplying brine solution to the nanofilter, and including the [[step]] steps of:

a) directing liquid from the brine tank to the nanofilter;

b) directing the liquid on the downstream side of the nanofilter to the brine tank;

c) directing the liquid on the upstream side of the nanofilter to a drain; and

d) powering the pump concurrently with operating the second diverter valve.

3. (Currently Amended) The first process of claim [[2]] 1, wherein the water softening system includes a third diverter valve receiving the brine solution from the second diverter valve, and the process further includes the step of directing liquid from the second diverter valve away from the brine tank responsive to a predetermined condition.

4. (Currently Amended) The first process of claim [[2]] 3 wherein the water softening ~~system includes a third diverter valve receiving the brine solution from the second diverter valve, and the~~ process further includes the steps of:

a) testing the salinity concentration of the liquid from the downstream end of the softening tank; and

b) responsive to said salinity concentration above a predetermined level, directing the liquid from the second diverter valve to the brine tank, and responsive to said salinity concentration below the predetermined level, directing the liquid from the second diverter valve away from the brine tank.

5. (Currently Amended) The first process of claim [[2]] 3 wherein the ~~water softening system includes a third diverter valve receiving the brine solution from the second diverter valve, and the~~ process further includes the steps of:

a) timing from the start of the operating step for the second valve; and

b) responsive to said timing exceeding a predetermined time, directing fluid from the second diverter valve away from the brine tank.

6. (Currently Amended) The second process of claim 3, [[2,]] including the step of directing the fluid from the brine tank~~, unmodified,~~ to the nanofilter having a minimum of approximately

90% multivalent salts rejection and a maximum of approximately 20% monovalent salts rejection.

7. (Currently Amended) The second process of claim [[6]] 2, which further ~~wherein the water softening system~~ includes a throttling valve connected to the upstream side of the nanofilter, and further includes ~~including~~ the step of maintaining a higher pressure on the upstream side of the nanofilter than in the brine tank.

8. (Canceled).

9. (Currently Amended) The process of claim [[1]] 5, including the step of maintaining the concentration of the brine in the brine tank above approximately 10%.

10-16. (Canceled).

17. (Currently Amended) The first process of claim [[1]] 5, further including [[the]] a step of maintaining the concentration of the brine in the brine tank above a predetermined concentration.